8. Juliana

Program Name: Juliana.java **Input File: juliana.dat**

J.U.L.I.A.N.A. is a new "AI" software you have been tasked to write at your new internship. Your job is to use LinkedIn networks to find qualified candidates for jobs at your company. You will be given an employee name and a job listing, and you need to see if anyone in that employee's network is qualified for the job.

Input: The input will begin with two integers, `n` (`0 < n <= 1000`) and `e` (`0 < n <= 1000`), denoting the number of test cases to follow, and the number of people listed in the LinkedIn input you are given. The following `e` lines will each contain a listing of a person on LinkedIn in the following format [without parentheses and brackets]: `FirstName LastName: (years of experience) (major) (field) [0 or more Full Names denoting everyone they are connected to]`. Following these `e` lines, the n test cases will follow. Each test case will consist of two lines. The first will contain a first and last name, denoting the person whose network we will be testing for qualified candidates. The next line will contain job requirements in the following format: `(years of experience) (major/field)`. In order for a candidate to be qualified, they need at least the required years of experience, and they must work in the given field or have the correct college major.

Output: For each test case, output an alphabetized list of the full names of all qualified candidates who are connected to the given employee, with multiple names separated by a comma and a space. If there are no qualified candidates in the given employee's network, print an empty line.

Sample input:

```
3 5
Sam Franklin: 6 CS CS John Adams Tom Jennings
John Adams: 3 Music Accounting
Tom Jennings: 2 CS Accounting Sam Franklin
George Paul: 2 Accounting CS Tom Jennings
James Lebron: 4 Music CS John Adams
Sam Franklin
2 CS
James Lebron
4 Accounting
George Paul
2 Accounting
```

Sample output:

```
Tom Jennings

John Adams, Tom Jennings
```